

Title (en)
Pulverized coal combustion method.

Title (de)
Verfahren zur Verbrennung von Kohlenstaub.

Title (fr)
Procédé de combustion de charbon pulvérisé.

Publication
EP 0385499 B1 19931118 (EN)

Application
EP 90104110 A 19900302

Priority
JP 4987489 A 19890303

Abstract (en)
[origin: EP0385499A2] The method including the steps of separating pulverized coal mixture gas (2) ejected from a vertical type coal grinder containing a rotary type classifier (1) therein into thick mixture gas (4) and thin mixture gas (5) by means of a distributor (3), and injecting these thick and thin mixture gases respectively through separate burner injecting ports (6,7) into a same furnace (8) to make them burn, is improved so as to reduce both an unburnt fuel content in ash and a nitrogen oxide concentration in exhaust gas while maintaining excellent ignition characteristic. The improvements reside in that an air-to-fuel ratio of the thick mixture gas is chosen at 1 - 2, while an air-to-fuel ratio of the thin mixture gas is chosen at 3 - 6, and the range of a degree of pulverization of the pulverized coal is regulated at 100 mesh residue 1.5% or less. The degree of pulverization of the pulverized coal fed to the distributor is regulated either by adjusting a rotational speed of the rotary type classifier (65) or by adjusting the angles formed between classifying vanes (75) rotating about the axis of the rotary type classifier and the direction of rotation.

IPC 1-7
F23K 1/00; B02C 23/32; B07B 7/083

IPC 8 full level
F23C 99/00 (2006.01); **B02C 23/32** (2006.01); **B07B 7/083** (2006.01); **F23K 1/00** (2006.01)

CPC (source: EP US)
B02C 23/32 (2013.01 - EP US); **B07B 7/083** (2013.01 - EP US); **F23K 1/00** (2013.01 - EP US); **B02C 2015/002** (2013.01 - EP US);
F23C 2201/101 (2013.01 - EP US); **F23K 2201/10** (2013.01 - EP US)

Cited by
EP0747629A4; CN103008088A; CN110153004A; EP0668469A3; EP0428932A3; US5429060A

Designated contracting state (EPC)
BE DE FR IT NL

DOCDB simple family (publication)
EP 0385499 A2 19900905; EP 0385499 A3 19910522; EP 0385499 B1 19931118; CA 2011408 A1 19900903; CA 2011408 C 19940510;
DE 69004594 D1 19931223; DE 69004594 T2 19940519; JP 2813361 B2 19981022; JP H02230004 A 19900912; US 5003891 A 19910402

DOCDB simple family (application)
EP 90104110 A 19900302; CA 2011408 A 19900302; DE 69004594 T 19900302; JP 4987489 A 19890303; US 48508790 A 19900226